Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993	)	WT Docket No. 13-135
	)	
	)	
Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services	)	

COMMENTS OF MOBILE FUTURE

Mobile Future, a coalition of wireless technology and communications companies and non-profit organizations, respectfully submits these comments in response to the Federal Communications Commission's ("FCC's" or "Commission's") public notice seeking input and data for its Seventeenth Annual Report on the State of Competition in Mobile Wireless.[1] As the Commission's recent data indicated[2], America's wireless consumers today benefit from one of the most dynamically competitive sectors in our nation's economy. As previous Commissioners have concluded and as market realities clearly show, the wireless market in our nation is effectively competitive, and the Commission should embrace the data and trends and recognize this fact.

[1] Wireless Telecommunications Bureau Seeks Comment on the State of Mobile Wireless Competition, *Public Notice*, WT Docket 13-135 (rel. May 17, 2013).

[2] Mobile Future Infographic, "The United States of Wireless," (June 3, 2012) *available at* http://mobilefuture.org/resources/united-states-of-wireless-infographic/.

I. Competitive Forces are Hallmarks of the U.S. Wireless Ecosystem.

In our rapidly changing wireless arena, mobile innovators compete effectively in a variety of ways, from pricing and devices to applications and services. This competition drives a highly dynamic marketplace aimed at meeting consumers' needs, as evidenced by strong consumer satisfaction with mobile services and devices across all demographics. Ninety-one percent of wireless consumers are "highly satisfied with their wireless phone service."[3] And consumer satisfaction with their smartphones has increased "significantly" as device manufacturers continue to innovate and compete on increasingly advanced wireless networks.[4]

Consumers are highly satisfied because they benefit from competition across all vectors of our rapidly evolving wireless ecosystem. Price competition – vigorous already – continues to increase with additional pre-paid options as well as new market entrants, such as service providers like FreedomPop, offering packages of 4G wireless data, text and voice service, for free.[5] With mobile data[6] and voice prices decreasing,[7] the price consumers pay for wireless

---

[3] MyWireless.org, 2013 National Consumer Survey (April 2013), http://www.mywireless.org/media-center/data-center/2013-national-survey/#consumersatisfaction.

[4] Press Release, J.D. Power & Associates, 2013 U.S. Wireless Smartphone Satisfaction Study – Volume 1 and 2013 U.S. Wireless Traditional Mobile Phone Satisfaction Study – Volume 1 (March 21, 2013), http://www.jdpower.com/content/press-release/5TAb5Uk/2013-u-s-wireless-smartphone-satisfaction-study-volume-1-and-2013-u-s-wireless-traditional-mobile-phone-satisfaction-study-volume-1.htm; Press Release, J.D. Power & Associates, Wireless Service Spending Increases Dramatically Among Customers Who Experience Faster Network Connections (March 7, 2013), http://www.jdpower.com/content/press-release/VF9361y/2013-u-s-wireless-network-quality-performance-study--vol-1.htm.

[5] *See* Adam Popescu, FreedomPop Announces Free Mobile Service, Mashable (June 5, 2013), http://mashable.com/2012/06/05/freedompop-free/.

[6] *See* Visage, Infographic: The Staggeringly Huge Future of Mobility, http://visagemobile.com/mobilityblog/2012/09/06/infographic-the-staggeringly-huge-future-of-mobility/ (last visited Jun. 4, 2013)

[7] *See* Anna-Maria Kovacs, Wireless Competition Brings Value and Choice to Consumers, Fierce Wireless (March 26, 2013), http://www.fiercewireless.com/story/kovacs-wireless-competition-brings-value-and-choice-consumers/2013-03-26.

service continues its decade-long decline.[8] Wireless providers also compete with flexible, innovative pricing options for access to increasingly advanced, high-speed mobile broadband networks, increasing consumer choice.[9]

But price is not the only dimension marked by effective competition. As the Commission itself has recognized, "the products, services, and applications that rely on" mobile networks also have a "key role."[10] The Commission's own data underscores this point. As the FCC last year reminded us, consumers can choose from 266 wireless devices from 23 manufacturers,[11] and 9 out of ten Americans have at least three mobile broadband providers competing for their business.[12] The two leading app stores each now have over 800,000 apps,[13] and consumers can choose from nearly 30 other app stores as well.[14] Consumers consider all of these factors – devices, applications, and service – when making their wireless selections.

---

[8] *See* Robert Hahn and Hal Singer, Georgetown University McDonough School of Business, WIRELESS COMPETITION: AN UPDATE 3 (May 2, 2012), http://www.gcbpp.org/files/EPV/EPV_WirelessCompetition_AnUpdate.pdf.

[9] *See* Ed Waters, Consumers Benefit from More Choice in Prepaid Mobile Plans, RootzWiki (May 21, 2013), http://rootzwiki.com/news/_/articles/editorials/consumers-benefit-from-more-choice-in-prepaid-mobile-plans-r1652; *see also* Cody Lee, Free Wireless Internet Provider FreedomPop to Go LTE, iDowloadBlog (July 11, 2012), http://www.idownloadblog.com/2012/07/11/freedompop-goes-lte/.

[10] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, *Fifteenth Report*, 26 FCC Rcd 9664, 9773 ¶ 103 (2011); *see also* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, *Sixteenth Report*, 28 FCC Rcd 3700, 3821 ¶¶ 180–242 (2013) (presenting "evidence in three broad categories of non-price rivalry among mobile wireless service providers") ("*Sixteenth Report*").

[11] *Sixteenth Report*, 28 FCC Rcd at 3915 ¶ 343.

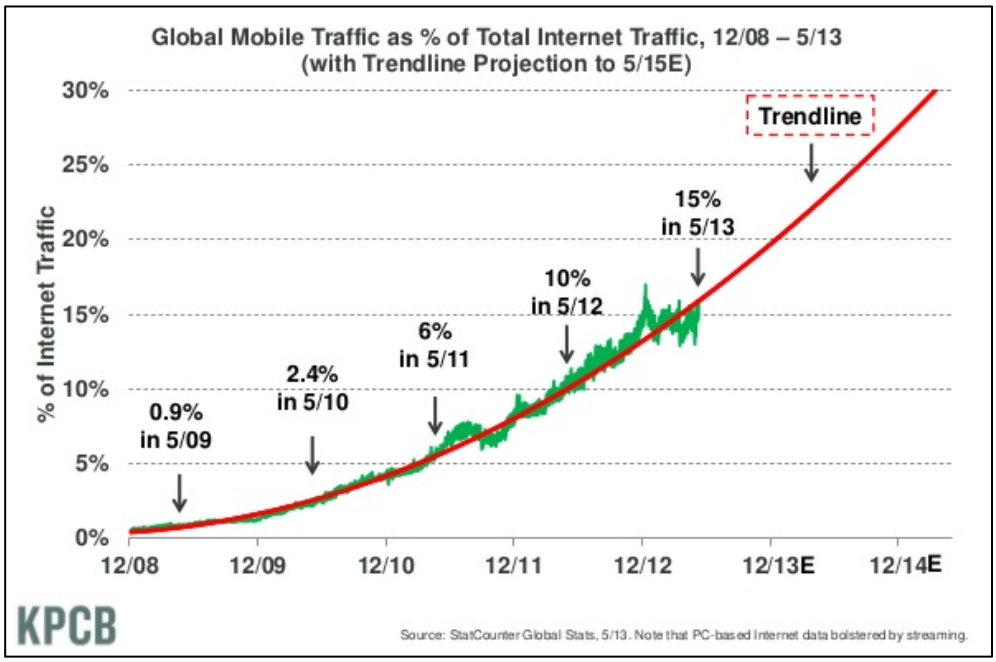
[12] *Id.* at 3749 ¶ 48.

[13] Veronica Maria Jarski, The App Arms Race: iOS vs. Android, MarketingProfs (May 4, 2013), http://www.marketingprofs.com/chirp/2013/10690/the-app-arms-race-infographic.

[14] *See* CTIA, 50 Wireless Quick Facts, Wireless Ecosystem: Innovation, http://ctia.org/advocacy/research/index.cfm/AID/10378 (last visited June 4, 2013) ("CTIA Wireless Quick Facts").

II. The Mobile Industry Continues to Experience Staggering Growth While Investing and Innovating to Meet Consumer Demand.

Mobile traffic in the U.S. grew 62 percent last year[15] and continues to grow rapidly. By 2017, mobile data traffic *alone* will have increased four-fold over the entire – wired and wireless – U.S. Internet volume in 2005.[16] Just four years ago, data and voice traffic stood at equilibrium.[17] Today, the scales have tipped dramatically: data now comprises 95 percent of total U.S. traffic.[18] Not just confined to the U.S., such trends represent a global phenomenon.[19]



[15] *See* Cisco, VNI Forecast Highlights, http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html (Select "Filter by Country"; select "Mobile" category) ("Cisco VNI Forecast Highlights").

[16] *See id*.

[17] Chetan Sharma Consulting, US Wireless Market Update: Q4 2012 and Full Year 2012 31 (March 2013), http://www.slideshare.net/chetansharma/us-wireless-marketq42012updatemarch2013chetansharmaconsulting-17151380?ref=http://www.chetansharma.com/ ("Wireless Market Update").

[18] *Id*.

[19] Mary Meeker and Liang Wu, KPCB, Internet Trends D11 Conference 32 (May 29, 2013), http://www.slideshare.net/kleinerperkins/kpcb-internet-trends-2013?ref=http://allthingsd.com/20130529/mary-meekers-internet-trends-report-is-back-at-d11-slides/ ("KPCB Internet Trends Report").

While mobile traffic growth data are eye opening, focusing only on those figures does not do justice to the increasing centrality of mobile in consumers' lives. Mobile devices now garner over 1 in 3 of our digital consumption minutes, while traditional computing continues to lose ground.[20] Americans now spend an hour every day on their smartphone on average, surging to two hours and 38 minutes if tablets are included.[21]

The cause for this explosive increase in mobile usage: widespread and rapid consumer adoption of smartphones and tablets. The U.S. now has an estimated 219 million smartphone subscriptions – nearly 60 percent of all mobile accounts.[22] Recognizing the benefits of these advanced devices – designed for utilization on advanced LTE networks – consumers continue to embrace this mobile technology. Nearly three-fourths of new acquisitions are smartphones.[23] And for the first time – as of June 2013 – "a majority of Americans now own a smartphone of some kind"[24] as wireless providers continue to roll out LTE networks.[25]

[20] Mark Donovan, comScore: 2013 Mobile Future in Focus 13 (March 20, 2013), http://www.comscore.com/Insights/Presentations_and_Whitepapers/2013/2013_Mobile_Future_in_Focus3 ("comScore White Paper").

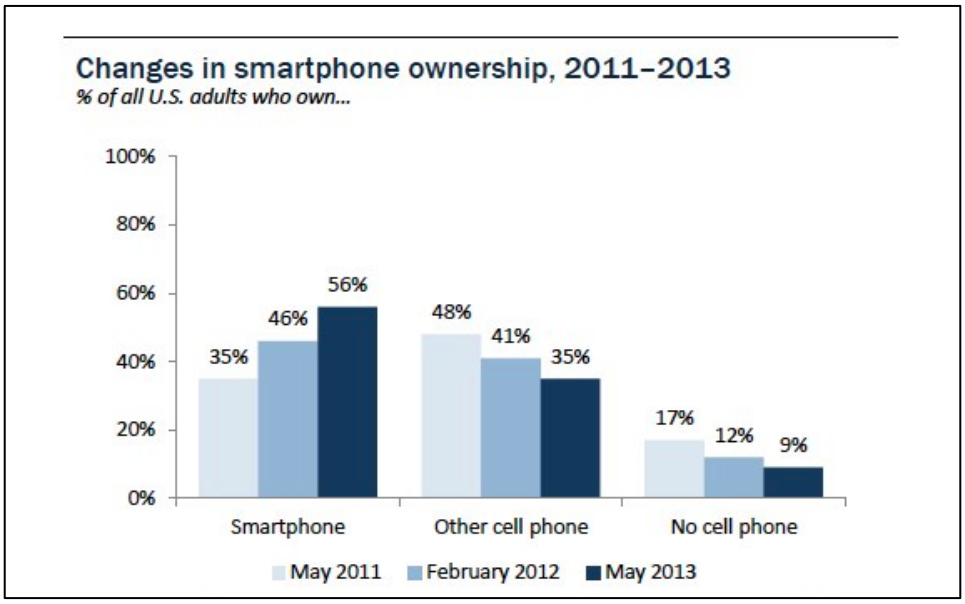
[21] *See* Ina Fried, Average American Spends an Hour a Day of Quality Time With Their Smartphone, AllThingsD (June 2, 2013), http://allthingsd.com/20130602/average-american-spents-an-hour-a-day-of-quality-time-with-their-smartphone/; Simon Khalaf, Flurry Five-Year Report: It's an App World. The Web Just Lives in It, Flurry Blog (April 3, 2013), http://blog.flurry.com/bid/95723/Flurry-Five-Year-Report-It-s-an-App-World-The-Just-Web-Lives-in-It.

[22] KPCB Internet Trends Report at 40.

[23] comScore White Paper at 18.

[24] Aaron Smith, Pew Internet & American Life Project: Smartphone Ownership 2013 (June 5, 2013), http://pewinternet.org/Reports/2013/Smartphone-Ownership-2013.aspx.

[25] Mikael Ricknäs, LTE and Smartphones Drive Mobile Traffic, Says Ericsson, CIO (June 3, 2013), http://www.cio.com/article/734337/LTE_and_Smartphones_Drive_Mobile_Traffic_Says_Ericsson; *see also infra* pp. 7-8.



Source: Pew Internet & American Life Project: Smartphone Ownership 2013

Smartphones are not the only enabler of this surge in mobile usage – consumers are adopting tablets at a historic rate: there were 40 million tablet owners just three years after they were introduced.[26] Nearly a decade passed before mobile phones achieved that penetration.[27] And last year alone, forty-two million tablets were sold.[28] Fifty-seven million Americans now own tablets.[29]

These figures bear witness to this simple truth: The U.S. is a global leader in mobile services, adoption, and innovation – powered in no small measure by our market's consistently effective competitive dynamics. American companies have developed the mobile operating systems powering 91 percent of smartphones around the world.[30] And our apps economy – a

[26] comScore White Paper at 10.

[27] *Id.*

[28] Wireless Market Update at 5.

[29] *Id.* at 24.

[30] Press Release, IDC, Android and iOS Combine for 91.1% of the Worldwide Smartphone OS Market in 4Q212 and 87.6% for the Year, According to IDC (Feb. 14, 2013), http://www.idc.com/getdoc.jsp?containerId=prUS23946013.

"'made in the U.S.A.' phenomenon" is creating hundreds of thousands of jobs and stimulating economic productivity and growth.[31] The global standard for high-speed mobile broadband, 4G LTE, is boosting this mobile revolution. The U.S. leads the world today with fifty percent of all LTE subscribers[32] – and the growth rate is staggering: a 450 percent increase from Q4 2011 to Q4 2012.[33] By 2018, LTE will cover sixty percent of the world's population, with LTE subscriptions exceeding one billion in 2017.[34]

Meeting consumer demand for mobile broadband services requires significant capital investment. The wireless sector has risen to that challenge. In 2011, wireless providers invested $23 billion in their networks.[35] Last year, mobile carrier capital expenditures topped $30 billion,[36] representing an average investment of $94 per subscriber – far outpacing the average global outlay.[37]

The results of these investments: better coverage, faster speeds, and stronger consumer satisfaction. Forty U.S. providers are offering, plan to offer, or are conducting trials of 4G LTE service,[38] covering nearly the entire country.[39] By 2017, the average speed of a mobile

---

[31] FCC, Significant FCC Actions and Key Developments in the Broadband Economy (March 22, 2013), http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0322/DOC-319728A1.pdf.

[32] *See* John Walls, *U.S. Leading Smartphone Revolution*, WP BRANDCONNECT (April 11, 2013), http://www.washingtonpost.com/sf/brand-connect/wp/2013/04/11/u-s-leading-smartphone-revolution/.

[33] *Compare* TeleGeography, US Remains at Forefront of LTE Service Adoption (March 15, 2012), http://www.telegeography.com/products/commsupdate/articles/2012/03/15/us-remains-at-forefront-of-lte-service-adoption/ *with* Lilly Vitorovich, *Europe is Losing the 4G Race*, WALL STREET JOURNAL (June 3, 2013), http://online.wsj.com/article/SB10001424127887324412604578515222989449746.html.

[34] Press Release, Ericsson, Ericsson Mobility Report: LTE and Smartphone Uptake Drives Video Traffic Growth (June 3, 2013), http://www.ericsson.com/news/1706363.

[35] *Sixteenth Report*, 28 FCC Rcd at 3719.

[36] CTIA, CTIA Semi-Annual Wireless Industry Survey (2013), http://files.ctia.org/pdf/CTIA_Survey_YE_2012_Graphics-FINAL.pdf.

[37] CTIA Wireless Quick Facts.

[38] 4G Americas, *4G Americas Global Deployments Status Update* 5 (May 31, 2013), http://4gamericas.org/UserFiles/file/Global%20Status%20Updates/Global%20Deployments%20May%2031%2C%202013.pdf.

connection will increase six-fold from 2012.[40] This, in essence, represents mobile's virtuous cycle: better devices spurring adoption, fostering more applications, increasing mobile traffic, leading to superior networks. And the process then begins anew.[41]

III. The Commission Must Prioritize Additional Licensed Spectrum to Enable Wireless Operators to Meet the Growing Consumer Demand.

Reassigning spectrum for exclusive licensed mobile broadband use will bring enormous economic benefits. The wireless industry is directly or indirectly responsible for nearly 4 million jobs, with average industry wages "far above the national average."[42] The wireless industry contributes $150 billion to the U.S. GDP,[43] a figure more impressive considering the *entire* Federal government contributes $625 billion.[44] As the White House Council of Economic Advisors has recognized, "[S]upporting the growth of [the wireless] industry through new spectrum allocation is likely to generate substantial economic benefits."[45]

The Commission has assigned and reallocated additional spectrum for mobile broadband, and those efforts deserve praise. Yet, the Commission's work is not yet done. More wireless

---

[39] *See* Mike Dano, LTE Coverage Targets and Subscriber Numbers, FierceBroadbandWireless (Oct. 24, 2012), http://www.fiercebroadbandwireless.com/special-reports/lte-coverage-targets-and-subscriber-numbers.

[40] *See* Cisco VNI Forecast Highlights.

[41] The Commission has recognized also that even components of the virtuous mobile cycle have become self-perpetuating growth cycles, all of which benefit consumers. In the Sixteen Report, the FCC found that "[t] he growing number of applications offered … increases the demand for the devices that run these operating systems. In turn, this increases the incentives for third parties to create applications for these operating systems. With devices running these operating systems being available from multiple service providers, consumers are able to choose a service provider based on other elements, including network quality, coverage, and price." *Sixteenth Report*, 28 FCC Rcd at 3846 ¶224.

[42] *See* Recon Analytics, THE WIRELESS INDUSTRY: THE ESSENTIAL ENGINE OF US ECONOMIC GROWTH 22 (April 30, 2012), http://reconanalytics.com/wp-content/uploads/2012/04/Wireless-The-Ubiquitous-Engine-by-Recon-Analytics-1.pdf.

[43] *See id.* at 1.

[44] *See* Annalyn Censky, Internet Accounts For 4.7% Of U.S. Economy, CNNMoney (March 19, 2012), http://money.cnn.com/2012/03/19/news/economy/internet_economy/index.htm

[45] *See* Executive Office of the President, Council of Economic Advisors, THE ECONOMIC BENEFITS OF NEW SPECTRUM FOR WIRELESS BROADBAND 16 (Feb. 2012), http://www.whitehouse.gov/sites/default/files/cea_spectrum_report_2-21-2012.pdf.

spectrum is essential to giving consumers access to mobile connectivity that fosters everything from engagement in distance learning, connecting to digital health applications, or linking up with loved ones. The Commission must double-down on its efforts to make additional spectrum available for mobile broadband services. Innovation occurs in both licensed and unlicensed bands, on exclusive and shared spectrum, but the FCC should continue to prioritize clearing and reallocating spectrum for exclusive licensed use by wireless providers.[46]

From deploying more efficient technologies – such as LTE and LTE-Advanced – and infrastructure investments to small cells and refarming efforts, wireless carriers are pursuing all options in the quest for additional mobile capacity. Yet, despite such efforts, the U.S. still faces a spectrum deficit. To maintain U.S. global mobile leadership, the FCC must continue its focus on implementing 600 MHz band incentive auctions, AWS auctions, and other initiatives that are designed to add more spectrum below 3 GHz for mobile broadband services, including, in particular, coordinating with NTIA to clear Federal operations from the 1755-1850 MHz band. And for all new spectrum made available, the FCC must maximize the public interest benefits of these new bands while ensuring broad and inclusive participation in the auctions.

In the interim, the FCC must continue to process secondary market transactions promptly and efficiently. Spectrum must be able to continue to flow to those providers that will put it to use for consumers. Efficient secondary markets are critical to this process.

IV. Conclusion

It is time for the Commission to proactively and affirmatively conclude what its own data and market trends consistently and clearly have indicated: potent competitive forces in America's mobile marketplace are driving greater wireless use, stimulating economic growth,

[46] *See generally* Rysavy Research, SPECTRUM SHARING: THE PROMISE AND THE REALITY (July 2012), http://www.rysavy.com/Articles/2012_07_Spectrum_Sharing.pdf.

bringing a range of new entrants, sparking historic levels of capital investment, and providing more choices for consumers in the number of services, devices, pricing options, applications, and providers than ever before. In short, if the Commission truly intends to rely on a data-driven approach to its analysis of public policy, then it should no longer permit its own facts to hide in plain sight, and instead conclude in its 17th Wireless Competition Report that the future is bright for American wireless, and that the marketplace for mobile services in our nation is indeed effectively competitive.

In addition, to meet the growing demand for data-intensive content on mobile devices, the Commission must prioritize efforts to address the industry-wide need for additional spectrum. Such actions would send a clear signal of U.S. commitment to maintaining its position as the global leader in wireless communications.

Respectfully submitted,

/s/ Jonathan Spalter

Jonathan Spalter, Chairman
Allison Remsen, Executive Director
Rachael Bender, Policy Director
Mobile Future
1325 Pennsylvania Avenue, N.W.
Suite 600
Washington, DC 20004
www.mobilefuture.org

June 17, 2013